

Physics 20 Unit One Exam Review

1. Change the units on the following measurements.

(a) $0.8202 \text{ m} = \underline{\hspace{2cm}} \text{ mm}$ (d) $345 \text{ kg} = \underline{\hspace{2cm}} \text{ dg}$

(b) $3.900 \text{ 78 cL} = \underline{\hspace{2cm}} \text{ daL}$ (e) $2.598 \text{ mm} = \underline{\hspace{2cm}} \text{ hm}$

(c) $24.6 \text{ km/h} = \underline{\hspace{2cm}} \text{ m/s}$ (f) $427.4 \text{ cal} = \underline{\hspace{2cm}} \text{ J}$

2. Complete the following calculations and place the answers in correct significant digits.

(a) $2.09\text{cm} + 23.9\text{cm}$ (d) $20.345 \text{ L} - 2.9 \text{ L}$

(b) $0.000 \text{ 127 s} + 0.000 \text{ 002 3 s}$ (e) $56 \text{ cm} \times 2.00 \text{ cm}$

(c) $7.95/0.0034$ (f) $(1.2 \times 10^6)(3.98 \times 10^{-4})$

3. If the number is in decimal notation, change it to scientific notation. If it is in scientific notation, put it in decimal notation.....blah, blah, blah.

(a) 0.000 000 214

(d) 120 000 (4 sig. fig.)

(b) 0.900

(e) 4.002×10^{-4}

(c) 2.190×10^2

(f) 1.98×10^5

5. Solve the following equations for the bold variable.

a) $\frac{hi}{ho} = \frac{di}{do}$

b) $A = \pi \mathbf{r}^2$

c) $V_f = V_i + \mathbf{a}t$

6. Anything in your notes is fair game. Read them over.